I hereby certify that this correspondence is being deposited via first class mail with the United States Postal Service addressed to: Commissioner of Patents and Trademarks, Alexandria, VA 22313, on September 29, 2005. The applicant and/or attorney requests the date of deposit as the filing date.

IFW

No signature & date) Nucle Barrie

Depositor: Robert Faber Nicole Garrese

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

9129105

re application of

OCT 0 8 2005

September 26, 2005

Cheng, et al. :

Group Art Unit: 2812

Serial No: 10/710,608

Examiner: Tara Washington

Filed: 7/23/04

International Business Machines Corporation

2070 Route 52

Hopewell Junction, NY 12533

<u>TITLE:</u> Patterned Strained Semiconductor Substrate and Device

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to the duty of disclosure set forth in 37 C.F.R. 1.56, and further pursuant to the provisions of 37 C.F.R. 1.97 and 1.98, applicants hereby respectfully submit copies of the US and non-US patents and publications as listed on Form PTO-1449, attached hereto.

In citing these documents, no representation is made nor intended as to the pertinency or nonpertinency of the art, that better art than that listed is not available, or that other art is not applicable.

No fee is believed to be due for this submission. If any fees are required, however, the Commissioner is hereby authorized to charge such fees to Deposit Account No. 09-0458.

Respectfully submitted,

Cheng, et al.

Joseph P. Abate

Registration No. 30,238

Telephone No. 845-894-4633

9-26-05

` /	101	PRIMATION DISCLOSUR	E CITATION		Docket Number (Optional) FIS920040150US1 Applicant(s))	Application Number 10/710,608	r	
		(Gregoveral sheets if necess	cary)		Cheng, et al. Filing Date 7/23/04		Group Art Unit	 -	
			U.	.S. PATENT	DOCUMENTS	<u> </u>	2012		
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	T	NAME	CLASS	SUBCLASS		G DATE
		3,602,841	8-31-71	McGro	ddy			IF APP	ROPRIATE
		4,665,415	5-12-87	Esaki,	et al.				
		4,853,076	8-1-89	Tsaur,	et al.				
	4,855,245 8-8-89 Nepp			Neppl,	et al.				
		4,952,524	8-28-90	Lee, et	al.				
			U.S. PATEN	T APPLICA	ATION PUBLICATIONS	S			
EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	1	G DATE OPRIATE
		US 2001/0009784 A1	7-26-01	Ma, et a	al.				
		US 2002/0063292 A1	5-30-02	Armstr	ong, et al.				
		US 2002/0074598 A1	6-20-02	Doyle, e	et al.				
		US 2002/0086472	7-4-02	Roberd	s, et al.				_
			FORE	EIGN PATE	NT DOCUMENTS				
	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	Tran YES	slation NO
		JP64-76755	03-1989	Japan					
	,								
				DOCUMEN		thor, Title, Date, Po	9 ,	•	
		Kern Rim, et al., "Tran Devices Meeting, 26, 8,	sconductance En 1, IEEE, Septem	hancement ber 1998.	in Deep Submicron S	trained-Si n-MO	SFETs". Interi	iational El	ectron
		Kern Rim, et al., "Char VLSI Technology Diges	acteristics and D t of Technical Pa	evice Desig pers, IEEE	n of Sub-100 nm Strai 3, pp. 98-99.	ned Si N- and Pl	MOSFETs." 20	02 Sympo	sium on
XAMINEF	2				DATE CONSIDERED	<u> </u>			
XAMINER ot consider	R: Initia	l if citation considered, whether c lude copy of this form with next c	or not citation is in communication to s	conformanc	e with MPEP Section 609); Draw line throug	th citation if not i	n conforma	nce and

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional) FIS920040150US1	Application Number 10/710,608	
Applicant(s) Cheng, et al.		
Piling Date	Group Art Unit	
7/23/04	2812	

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		4,958,213	9-18-90	Eklund, et al.			T. NOTAGATE
		5,006,913	4-9-91	Sugahara, et al.			
		5,060,030	10-22-91	Hoke, et al.			
		5,081,513	1-14-92	Jackson, et al.			
		5,108,843	4-28-92	Ohtaka, et al.			

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		US 2002/0086497 A1	7-4-02	Kwok			
		US 2002/0090791 A1	7-11-02	Doyle, et al.			
		US 2003/0032261 A1	2-13-03	Yeh, et al.			
		US 2003/0040158 A1	2-27-03	Saitoh			

FOREIGN PATENT DOCUMENTS

Τ –							
REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Tran	slation
						YES	NO
l							
						1	
	-						
]							
		·	•				
 1							

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

Gregory Scott, et al., "NMOS Drive Current Reduction Caused by Transistor Layout and Trench Isolation Induced Stress." International Electron Devices Meeting, 34.4.1, IEEE, September 1999.

F. Ootsuka, et al., "A Highly Dense, High-Performance 130nm Node CMOS Technology for Large Scale System-on-a-Chip Application." International Electron Devices Meeting, 23.5.1, IEEE, April 2000.

EXAMINER

DATE CONSIDERED

	INFO	PRMATION DISCLOSUR (Use several sheets if neces.			FIS920040150US1 Applicant(s) Cheng, et al.		Application Number 10/710,608			
		(Ose several sneets if neces.	sury)		Filing Date		Group Art Unit			
					7/23/04		2812			
			U.	S. PATENT	DOCUMENTS					
•EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS		G DATE ROPRIATE	
		5,134,085	7-28-92	Gilgen,	et al.					
		5,310,446	5-10-94	Konish	i, et al.					
		5,354,695	10-11-94	Leedy						
		5,371,399	12-6-94	Burrou	ghes, et al.		,	Ì		
		5,391,510	2-21-95	Hsu, et	al.				=.	
			U.S. PATEN	T APPLICA	ATION PUBLICATIONS	<u>.</u>				
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS		G DATE COPRIATE	
		US 2003/0057184 A1	3-27-03	Yu, et a	l.					
		US 2003/0067035 A1	4-10-03	Tews, e	t al.					
			FORE	IGN PATE	NT DOCUMENTS					
	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	Tran YES	signion NO	
									<u> </u>	
			OTHER I	DOCUMEN	TS (Including Aut	hor, Title, Date, F	ertinent Pages, Etc	·.)		
		Shinya Ito, et al., "Mec International Electron	hanical Stress Ef Devices Meeting,	fect of Etcl 10.7.1, IEI	n-Stop Nitride and its I EE, April 2000.	mpact on Deep	Submicron Tran	sistor Des	ign."	
		A. Shimizu, et al., "Loc International Electron	al Mechanical-St Devices Meeting,	ress Contro IEEE, Ma	ol (LMC): A New Tech rch 2001.	nique for CMO	S-Performance	Enhancem	ent."	
EXAMINE	R				DATE CONSIDERED					
		al if citation considered, whether clude copy of this form with next			te with MPEP Section 609	; Draw line throu	gh citation if not i	n conforma	nce and	

P09A/REV05

Docket Number (Optional) Application Number FIS920040150US1 10/710,608 INFORMATION DISCLOSURE CITATION Applicant(s) Cheng, et al. (Use several sheets if necessary) Filing Date Group Art Unit 2812 7/23/04 **U.S. PATENT DOCUMENTS** EXAMINER FILING DATE DOCUMENT NUMBER DATE SUBCLASS REF NAME **CLASS** INTTIAL IF APPROPRIATE 10-17-95 5,459,346 Asakawa, et al. 12-5-95 5,471,948 Burroughes, et al. 9-17-96 5,557,122 Shrivastava, et al. 5,561,302 10-1-96 Candelaria 10-15-96 5,565,697 Asakawa, et al. U.S. PATENT APPLICATION PUBLICATIONS *EXAMINER FILING DATE DOCUMENT NUMBER DATE NAME CLASS SUBCLASS INITIAL IF APPROPRIATE FOREIGN PATENT DOCUMENTS Translation DATE SUBCLASS REP DOCUMENT NUMBER COUNTRY CLASS YES NO

(Including Author, Title, Date, Pertinent Pages, Etc.) K. Ota, et al., "Novel Locally Strained Channel Technique for High Performance 55nm CMOS." International Electron Devices Meeting, 2.2.1, IEEE, February 2002.

G. Zhang, et al., "A New 'Mixed-Mode' Reliability Degradation Mechanism in Advanced Si and SiGe Bipolar Transistors." IEEE Transactions on Electron Devices, vol. 49, no. 12, December 2002, pp. 2151-56.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

OTHER DOCUMENTS

Docket Number (Optional) Application Number FIS920040150US1 10/710,608 Applicant(s) INFORMATION DISCLOSURE CITATION Cheng, et al. (Use several sheets if necessary) Filing Date Group Art Unit 7/23/04 2812 **U.S. PATENT DOCUMENTS** *EXAMINER FILING DATE SUBCLASS CLASS REF DOCUMENT NUMBER DATE NAME INITIAL. IF APPROPRIATE 11-5-96 5,571,741 Leedy 1-7-97 5,592,007 Leedy 1-7-97 5,592,018 Leedy 5,670,798 9-23-97 · Schetzina 5,679,965 10-21-97 Schetzina U.S. PATENT APPLICATION PUBLICATIONS EXAMINER FILING DATE NAME CLASS SUBCLASS REF DOCUMENT NUMBER DATE INITIAL IF APPROPRIATE FOREIGN PATENT DOCUMENTS Translation DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS YES NO OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) H.S. Momose, et al., "Temperature Dependence of Emitter-Base Reverse Stress Degradation and its Mechanism Analyzed by MOS Structures." Paper 6.2, pp. 140-143.

EXAMINER

DATE CONSIDERED

C.J. Huang, et al., "Temperature Dependence and Post-Stress Recovery of Hot Electron Degradation Effects in Bipolar Transistors." IEEE 1991 Bipolar Circuits and Technology Meeting 7.5, pp. 170-173.

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1989

no date

Docket Number (Optional) Application Number 10/710,608 FIS920040150US1 INFORMATION DISCLOSURE CITATION Applicant(s) Cheng, et al. (Use several sheets if necessary) Filing Date Group Art Unit 7/23/04 2812 **U.S. PATENT DOCUMENTS** *EXAMINER FILING DATE SUBCLASS REF DOCUMENT NUMBER DATE NAME CLASS INTITAL IF APPROPRIATE 11-4-97 Candelaria 5,683,934 5,840,593 11-24-98 Leedy 1-19-99 Brasen, et al. 5,861,651 5,880,040 3-9-99 Sun, et al. 5,940,716 8-17-99 Jin, et al. U.S. PATENT APPLICATION PUBLICATIONS EXAMINER FILING DATE SUBCLASS REF DOCUMENT NUMBER DATE NAME CLASS INITIAL IF APPROPRIATE FOREIGN PATENT DOCUMENTS Translation DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS YES NO OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) S.R. Sheng, et al., "Degradation and Recovery of SiGe HBTs Following Radiation and Hot-Carrier Stressing." Pp. 14-15. no date Z. Yang, et al., "Avalanche Current Induced Hot Carrier Degradation in 200 GHz SiGe Heterojunction Bipolar Transistors." Pp. 1-5. 1989

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

EXAMINER

DATE CONSIDERED

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)	Application Number	
FIS920040150US1	10/710,608	
Applicant(s) Cheng, et al.		
Piling Date	Group Art Unit	
7/23/04	2812	

					//23/04		2012		
			U.S	S. PATENT	DOCUMENTS				
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS		G DATE OPRIATE
		5,940,736	8-17-99	Brady,	et al.				
		5,946,559	8-31-99	Leedy					
	·	5,960,297	9-28-99	Saki					
		5,989,978	11-23-99	Peidou	3				
		6,008,126	12-28-99	Leedy					
			U.S. PATENT	T APPLICA	ATION PUBLICATIONS				
EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING	
				<u></u> .					
		·							
			FORE	IGN PATE	NT DOCUMENTS				
	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	Trans YES	iation NO
							:		
	Ì								
	ĺ			-					
			OTHER D	OCUMEN	TS (Including Author	r, Title, Date, Peri	tinent Pages, Etc	:.)	
		H. Li, et al., "Design of Systems." 2003 IEEE G	W-Band VCOs w SaAs Digest, pp. 2	rith High (263-66.	Output Power for Potentia	d Application in	n 77 GHz Auto	motive Ra	dar
		ļ ·							
			ealing of Degrade pril 1994, pp. 533	d npn-Trs 3-38.	nsistors- Mechanisms an	d Modeling." I	EEE Transact	tions on El	ectron

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)	Application Number	
FIS920040150US1	10/710,608	
Applicant(s) Cheng, et al.		
Filing Date	Group Art Unit	

		(Ose several sheets if necess	sur y)						
					Filing Date 7/23/04	G	Group Art Unit 2812		
			U.S	S. PATENT	Γ DOCUMENTS				
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	i .	G DATE ROPRIATE
		6,025,280	2-15-00	Brady,	et al.				
		6,046,464	4-4-00	Schetzi	ina				
		6,066,545	5-23-00	Doshi,	et al.				
		6,090,684	7-18-00	Ishitsu	ka, et al.				
		6,107,143	8-22-00	et al.					
			U.S. PATEN	T APPLIC	ATION PUBLICATIONS				
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	Į.	G DATE OPRIATE
			FORE	IGN PATE	ENT DOCUMENTS				
	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	Trao	slation
	,							YES	NO
			OTHER I	DOCUMEN	iTS (Including Aut	thor, Title, Date, Pen	tinent Pages, Etc	•)	
	_	B. Dovle, et al., "Recov					-		ce
		B. Doyle, et al., "Recov Letters, vol. 13, no. 1, J	anuary 1992, pp.	38-40.	THE ASSOCIATION OF THE PROPERTY OF THE PROPERT	V. 301 2 2 2			
	+	H.S. Momose, et al., "A for Bi-CMOS." IEEE	analysis of the Ter	mperature	Dependence of Hot-Ca	rrier-Induced De	gradation in B	ipolar Tra	nsistors
		for Bi-CMOS." IEEE	Transactions on E	Electron De	evices, vol. 41, no. 6, Ju	ne 1994, pp. 978-9	i87.		
EXAMINE	₹				DATE CONSIDERED				

	INFC	ORMATION DISCLOSUR	E CITATION		Docket Number (Optional) FIS920040150US1 Applicant(s)		Application Number	·	
	2112	(Use several sheets if necess			Cheng, et al.				
					Filing Date		Group Art Unit		
					7/23/04		2812		
	<u>, </u>		U.	.S. PATENT	DOCUMENTS			_	
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	Í	G DATE
		6,117,722	9-12-00	Wuu, e	t al.				
		6,133,071	10-17-00	Nagai					
		6,165,383	12-26-00	Chou					
		6,221,735	4-24-01	Manley	, et al.				
		6,228,694	5-8-01	Doyle,	et al.			,	
			U.S. PATEN	T APPLICA	ATION PUBLICATIONS				
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS		G DATE COPRIATE
			FORE	EIGN PATE	NT DOCUMENTS				
	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS		nslation No.
	\vdash			+			+	YES	NO
				 			_		
			 	 					<u> </u>
			-	 					-
				+					ļ
								-	
	<u> </u>			DOCUMEN			ertinent Pages, Etc		
: 		M. Khater, et al. 3.3 ps". 2004 IE	, "SiGe HBT TO	'echnology	y with Fmax/Ft = 35	0/300 GHz ar	id Gate Delay	Below	
,		J.C. Bean, et al. Epitaxy". J. Vac	, "GEx SI 1-x . Sci. Techno	:/Si Strai ol. A 2(2)	ined-Layer Superlat), AprJune 1984,	tice Grown b	oy Molecular	Beam	
EXAMINEI	R				DATE CONSIDERED				
		al if citation considered, whether clude copy of this form with next			ce with MPEP Section 609;	; Draw line throu	gh citation if not i	n conforma	nce and

Application Number Docket Number (Optional) 10/710,608 FIS920040150US1 INFORMATION DISCLOSURE CITATION Applicant(s) Cheng, et al. (Use several sheets if necessary) Group Art Unit Filing Date 2812 7/23/04 U.S. PATENT DOCUMENTS EXAMINER FILING DATE REF DOCUMENT NUMBER DATE NAME CLASS SUBCLASS INITIAL IF APPROPRIATE 6,246,095 6-12-01 Brady, et al. 6,255,169 7-3-01 Li, et al. 6,261,964 7-17-01 Wu, et al. 7-24-01 6,265,317 Chiu, et al. 8-14-01 6,274,444 Wang U.S. PATENT APPLICATION PUBLICATIONS EXAMINER FILING DATE REF DOCUMENT NUMBER DATE NAME CLASS SUBCLASS INITIAL IF APPROPRIATE FOREIGN PATENT DOCUMENTS Translation CLASS SUBCLASS REF DOCUMENT NUMBER DATE COUNTRY YES NO **OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.) J.H. Van Der Merwe, "Regular Articles". Journal of Applied Physics, Volume 34, No. 1, January 1963, pp. 117-122.

EXAMINER

DATE CONSIDERED

J.W. Matthews, et al., "Defects in Epitaxial Multilayers". Journal of Crystal Growth 27

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(1974), pp. 118-125.

Docket Number (Optional) Application Number FIS920040150US1 10/710,608 INFORMATION DISCLOSURE CITATION Applicant(s) (Use several sheets if necessary) Cheng, et al. Filing Date Group Art Unit 2812 7/23/04 **U.S. PATENT DOCUMENTS** EXAMINER FILING DATE REP DOCUMENT NUMBER DATE NAME CLASS SUBCLASS INTUAL. IF APPROPRIATE 6,281,532 8-28-01 Doyle, et al. 6,284,623 9-4-01 Zhang, et al. 6,284,626 9-4-01 Kim 6,319,794 11-20-01 Akatsu, et al. 6,361,885 3-26-02 Chou U.S. PATENT APPLICATION PUBLICATIONS EXAMINER FILING DATE REF DOCUMENT NUMBER DATE NAME CLASS SUBCLASS INITIAL IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

RF	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation		
							YES	NO	

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

Subramanian S. Iyer, et al., "Heterojunction Bipolar Transistors Using Si-Ge Alloys". IEEE Transactions on Electron Devices, Vol. 36, No. 10, October 1989, pp. 2043-2064.

R.H.M. Van De Leur, et al., "Critical Thickness for Pseudomorphic Growth of Si/Ge Alloys and Superlattices". J. Appl. Phys. 64 (6), 15 September 1988, pp. 3043-3050.

EXAMINER

DATE CONSIDERED

	INFC	ORMATION DISCLOSUR	RE CITATION		Docket Number (Optional) FIS920040150US1 Applicant(s)	Application Number 10/710,608				
	1114	(Use several sheets if necess			Cheng, et al.					
	Filing Date 7/23/04						Group Art Unit 2812			
			U.f	.S. PATENT	DOCUMENTS					
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	1	NG DATE ROPRIATE	
		6,362,082	3-26-02	Doyle, e	et al.					
		6,368,931	4-9-02	Kuhn, e	et al.					
		6,403,486 6-11-02 L		Lou						
		6,403,975	6-11-02	Brunner	r, et al.					
		6,406,973	6-18-02	Lee						
	•		U.S. PATEN	T APPLICA	ATION PUBLICATIONS					
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE		
				<u> </u>						
			FORE	IGN PATEN	NT DOCUMENTS					
	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	Trans YES	nslation NO	
								J		
			OTHER D	DOCUMENT	ΓS (Including Aut)	hor, Title, Date, Pe	ertinent Pages, Etc.	.)		
		D.C. Houghton, e (100) Si". Appl	t al., "Equili . Phys. Lett.	brium Cr: 56 (5),	ritical Thickness f 29 January 1990, p	for SI 1-x GF	x Strained L	ayers on	1	
									:	
XAMINEF	· ·			1	DATE CONSIDERED					
VAMINEI), Talet-	l if citation considered, whether o	on not election to be		and MERED Contra COO	Daniel II a Alexandra	ah akasia if aasi			

Docket Number (Optional) Application Number FIS920040150US1 10/710,608 INFORMATION DISCLOSURE CITATION Applicant(s) (Use several sheets if necessary) Cheng, et al. Piling Date Group Art Unit 7/23/04 2812 **U.S. PATENT DOCUMENTS** EXAMINER REF DOCUMENT NUMBER DATE FILING DATE NAME CLASS SUBCLASS INTITIAL IF APPROPRIATE 6,461,936 10-8-02 von Ehrenwall 6,476,462 11-5-02 Shimizu, et al. 6,483,171 11-19-02 Forbes, et al. 6,493,497 12-10-02 Ramdani, et al. 6,498,358 12-24-02 Lach, et al. U.S. PATENT APPLICATION PUBLICATIONS EXAMINER FILING DATE REP DOCUMENT NUMBER DATE NAME CLASS SUBCLASS INTTIAL IF APPROPRIATE FOREIGN PATENT DOCUMENTS DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS YES NO **OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

Cheng, et al. Piling Date Group Art Unit 2812	INFORMATION DISCLOSURE CITATION					FIS920040150US Applicant(s)	Application Number 10/710,608				
REP DOCUMENT NUMBER DATE NAME CLASS SUBCLASS PLIN PAPER						Cheng, et al. Piling Date					
NAME CLASS SUBCLASS FLAFFE				U	J.S. PATENT	DOCUMENTS		h			
6,501,121 12-31-02 Yu, et al.		REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS		NG DATE	
		<u> </u>	6,501,121	12-31-02	Yu, et a	Yu, et al.					
			6,506,652	1-14-03	Jan, et	al.					
			6,509,618	1-21-03	Jan, et a	Jan, et al.					
U.S. PATENT APPLICATION PUBLICATIONS *EXAMINER INITIAL REF DOCUMENT NUMBER DATE NAME CLASS SUBCLASS FILING IFF APPROXIMATION PROPERTY OF THE			6,521,964	2-18-03	Jan, et 1	Jan, et al.					
*EXAMINER NITIAL REF DOCUMENT NUMBER DATE NAME CLASS SUBCLASS FILING IF APPROXIMATION IN THE PROXIMATION IN			6,531,369	3-11-03	Ozkan,	et al.					
NITIAL REF DOCUMENT NUMBER DATE NAME CLASS SUBCLASS FILTER FRAPER FOREIGN PATENT DOCUMENTS REF DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS Trial YES TOTAL SUBCLASS SUBCLASS TRIAL YES		_		U.S. PATEN	NT APPLICA	TION PUBLICATION	vs.				
FOREIGN PATENT DOCUMENTS REF DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS TYES VES		REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	1	FILING DATE IF APPROPRIATE	
REF DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS Trains YES										AUG AMERICA	
REF DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS Trains YES											
REF DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS Trains YES											
REF DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS Trains YES											
YES VES VES				FORI	EIGN PATE	NT DOCUMENTS					
	I	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS		nslation NO	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)									"		
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			1							†	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		1	· · · · · · · · · · · · · · · · · · ·			-		1			
OTHER DOCUMENTS (Including Author, Tide, Date, Pertinent Pages, Etc.)					1			-		 	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		\exists				<u> </u>					
				OTHER'	DOCUMEN7	TS (Including A)	uthor, Title, Date, P	ertinent Pages, Etc	c.)	<u></u>	
		T									
		+					-				
EXAMINER DATE CONSIDERED	AMINER					DATE CONSIDERED					
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conforman	AMINER:	· Initia	il if citation considered, whether	or not citation is in	conformance	with MPFP Section 60	19. Draw line throug	ch sitution if not i	- conforms	-se and	

•	INPO	ORMATION DISCLOSUR	OF CITATION		Docket Number (Optional) FIS920040150US1 Applicant(s)	Application Number 10/710,608				
	HAPO	Use several sheets if necess			Cheng, et al.					
		, , , , , , , , , , , , , , , , , , , ,			Filing Date 7/23/04		Group Art Unit 2812			
			U.	S. PATENT	DOCUMENTS					
•EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS		FILING DATE IF APPROPRIATE	
		6,531,740	3-11-03	Bosco, e	et aL					
		6,621,392	9-16-03	Volant,	et al.					
-		6,635,506	10-21-03	Volant,	Volant, et al.					
	<u> </u>	6,831,292	12-14-04	Currie	Currie, et al.			_		
			TIC BATEN	T A PRI ICA	TON PURI ICATION					
*EXAMINER	——	1	1	TAPPLICA	ATION PUBLICATIONS			T PHIN	OBATE .	
INITIAL	REF	DOCUMENT NUMBER	DATE	-	NAME	CLASS	SUBCLASS	SUBCLASS FILING DATE IF APPROPRIAT		
				-						
			-				-	 		
		·	_	 						
			FORE	IGN PATE	NT DOCUMENTS					
				T		CT ASS	777.7466	Tran	ulation	
	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	YES	NO	
								<u> </u>		
				<u> </u>				 		
				 				 '		
				 		<u> </u>				
				<u> </u>						
			OTHER I	DOCUMEN	TS (Including Au	uthor, Title, Date, P	ertinent Pages, Etc	(۵		
EXAMINE	R				DATE CONSIDERED					
		ial if citation considered, whether clude copy of this form with next			e with MPEP Section 60)9; Draw line throu	gh citation if not i	n conforma	ince and	